

Application Number 10/033,303  
Responsive to Office Action mailed February 27, 2007

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

#### **Listing of Claims:**

Claim 1 (Currently Amended):     A network ~~encoding~~ method of ~~using a computer for transferring distributing data to a plurality of computers, comprising:~~  
      ~~sending a first portion of the data to a first computer;~~  
      ~~sending a second portion of the data to a second computer, where the second portion includes at least some of the data not sent to the first computer;~~  
      ~~after sending to the first computer and the second computer has commenced, sending a request for the data from a requesting computer to a targeted computer system;~~  
      ~~accessing at the targeted computer system a look-up list to identify at least the other first and second computers that have previously requested and downloaded at least a portion of the requested data;~~  
      ~~prior to receiving all of the data at the first and second computers, sending requests to the identified first and second computers, wherein upon receiving the requests the identified computers have received different partial portions of the requested data;~~  
      ~~independently encoding the different partial portions of the data at the identified computers in response to the requests;~~  
      ~~sending the first encoded different partial portion[[s]] of the data from the first identified computer[[s]] to the requesting computer and completing the download of the remaining portions of the data with the identified computers;~~  
      ~~sending at least some of the second portion of the data from the second computer to the requesting computer;~~  
      ~~receiving, with the requesting computer, the different partial first portion[s] of the encoded data from the first computer from at least two of the sending computers;~~

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receiving, with the requesting computer, at least some of the second portion of the data from the second computer, the data received from the second computer including at least some of the data not sent to the first computer; and

~~decoding the received encoded data to recreate the requested data from the different partial portions; and~~

saving the requested data in memory of the requesting computer to recreate the requested data.

Claim 2 (Currently Amended): The method of claim 1, wherein data transmission is accomplished from the ~~one or more other~~ computers over a peer-to-peer network, wherein the ~~other~~ computers that previously requested and downloaded at least a portion of the requested data are peers with the requesting computer.

Claim 3 (Original): The method of claim 1, wherein encoded packets are relayed.

Claim 4 (Original): The method of claim 1, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 5 (Original): The method of claim 1, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 6 (Currently Amended): The method of claim 1,  
wherein the look-up list is a mesh list that records which partial portions of the data each of the other computers has received, and  
wherein accessing the look-up list to identify the other computers includes selecting the identified ~~other~~ computers based on the record of which partial portions of the data each of the other computers has received.

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Claim 7 (Currently Amended): The method of claim 1, further comprising:  
~~wherein encoding the different partial portions of the data at the identified computers~~  
~~comprises~~ re-encoding each of the ~~different partial~~ first and second portions at the identified first  
and second client computers using ~~using~~ an acknowledgement independent equalized data packet  
encoding scheme that is a FEC encoding, and  
~~wherein decoding the received encoded data includes decoding the FEC encoded different~~  
~~partial~~ portions from the identified first and second client computers to recreate the requested  
data.

Claim 8 (Currently Amended): The method of claim 7[[1]], wherein the data that is to be  
encoded is segmented before encoding.

Claim 9 (Original): The method of claim 1, wherein the received encoded packets are decoded,  
and then re-encoded for further transmission upon request.

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Claim 10 (Currently Amended): A method of using a computer for transferring data, comprising:

- receiving a request for data from a requesting computer;
- accessing a look-up list to identify any peer computers that have previously downloaded at least a portion of the requested data;
- sending requests to the identified other peer computers, wherein at least two of the identified peer computers have downloaded different partial portions of the requested data upon receiving the requests, and wherein the at least two identified peer computers includes a first peer computer that has downloaded at least a first partial portion and a second peer computer that has downloaded at least a second partial portion without downloading all of the first partial portion;
- encoding the different partial portions of the requested data at the identified computers for network transmission, wherein the data is encoded using an acknowledgement-independent-equalized data-packet encoding system; and
- sending the encoded different partial portions of the data from at least two different ones of the peer computers to the requesting computer and completing the download of the data at the identified peer computers.

Claim 11 (Original): The method of claim 10, wherein data transmission is accomplished over a peer-to-peer network.

Claim 12 (Original): The method of claim 10, wherein encoded packets are relayed.

Claim 13 (Original): The method of claim 10, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 14 (Original): The method of claim 10, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 15 (Original): The method of claim 10, wherein the look-up list is a mesh list.

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Claim 16 (Original): The method of claim 10, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 17 (Original): The method of claim 10, wherein the data that is to be encoded is segmented before encoding.

Claim 18 (Currently Amended): A method of using a computer for transferring data from a set of peer computers to a requesting computer, comprising:

receiving a request for data at a source computer, ~~wherein the source computer~~  
maintaining[[s]] a list of peer computers that have previously downloaded at least a portion of the data, wherein the list records which partial portions of the data each of the other computers has received;

selecting a set of the peer computers based on the record of which partial portions of the requested data each of the peer computers has downloaded, wherein the set of peers includes a first peer computer that has downloaded at least a first partial portion downloaded and a second peer computer that has downloaded at least a second partial portion without downloading the first partial portion;

independently encoding the different portions of the data at the peer computers ~~using an acknowledgement independent equalized data packet encoding scheme~~ prior to receiving all of the data at the peer computers; and

sending the encoded different portions of the data from at least two different ones of the peer computers to the requesting computer and completing the download of the remaining portions of the data with the peer computers.

Claim 19 (Original): The method of claim 18, wherein data transmission is accomplished over a peer-to-peer network.

Claim 20 (Original): The method of claim 18, wherein encoded packets are relayed.

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Claim 21 (Previously presented): The method of claim 18, wherein the list is populated with nodes based on data transfer rates, and wherein each node represents a different one of the peer computers.

Claim 22 (Previously presented): The method of claim 18, wherein the list is populated with nodes based on data types stored within the nodes, and wherein each node represents a different one of the peer computers.

Claim 23 (Previously presented): The method of claim 18, wherein the list is a mesh list.

Claim 24 (Currently Amended): The method of claim 18, wherein encoding comprises encoding with the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 25 (Original): The method of claim 18, wherein the data that is to be encoded is segmented before encoding.

Claim 26 (Currently Amended): A method of using a computer for dynamically transferring data, comprising:

    sending a request for data to a targeted computer capable of servicing the request;  
    receiving encoded acknowledgement independent equalized data packets from at least two different sending computers that have previously downloaded different portions of the data from the targeted computer, wherein the sending computers include a first sending computer that has downloaded at least a first partial portion and a second sending computer that has downloaded at least a second partial portion without downloading all of the first partial portion.  
    wherein the sending computers send the downloaded different portions of the data and complete downloading of the remaining portions of the data;  
    decoding the received encoded data; and  
    saving the decoded data in memory.

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Claim 27 (Original): The method of claim 26, wherein data transmission is accomplished over a peer-to-peer network.

Claim 28 (Original): The method of claim 26, wherein the encoded packets are relayed.

Claim 29 (Previously presented): The method of claim 26, further comprising maintaining at the targeted computer a list of the computers that have previously downloaded at least a portion of the requested data, wherein the list is populated with nodes based on data transfer rates.

Claim 30 (Previously presented): The method of claim 29, wherein the list is populated with nodes based on data types stored within the nodes, and wherein each of the nodes represents a different one of the computers.

Claim 31 (Previously presented): The method of claim 29, wherein the list is a mesh list.

Claim 32 (Currently Amended): The method of claim 26, wherein the encoded packets are encoded with an acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 33 (Original): The method of claim 26, wherein the data that is to be encoded is segmented before encoding.

Claim 34 (Original): The method of claim 26, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

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Claim 35 (Currently Amended): A system for using a computer for transferring data, comprising:

means to send a request for data from a requesting computer to a targeted computer;

means to access a look-up list to identify other computers that have previously downloaded at least a portion of the requested data from the targeted computer, wherein the other computers includes a first peer computer that has downloaded at least a first partial portion and a second peer computer that has downloaded at least a second partial portion having at least some data different from the first partial portion;

means to send requests to the identified computers, ~~wherein the identified computers have only downloaded different partial portions of the requested data from the targeted computer system;~~

means to send the ~~first different~~ partial portion[[s]] of the data from the first peer computer and at least some of the second partial portion from the second peer computer ~~identified computers~~ to the requesting computer and complete downloading of the remaining portions of the data within the identified computers;

means to receive the different partial portions of the data from identified computers;

means to save the data in memory.

Claim 36 (Original): The system of claim 35, wherein data transmission is accomplished over a peer-to-peer network.

Claim 37 (Previously presented): The system of claim 35, wherein the data is relayed.

Claim 38 (Previously presented): The system of claim 35, wherein the look-up list is populated with nodes based on data transfer rates, and wherein each of the nodes represents a different one of the computers that have previously downloaded the data, and wherein the data transfer rates represents data transfer rates at which the data was previously downloaded to the computers.



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Claim 39 (Original): The system of claim 35, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 40 (Original): The system of claim 35, wherein the look-up list is a mesh list.

Claim 41 (Previously presented): The system of claim 35, further comprising means to encode the data at the identified computers using an acknowledgement independent equalized data packet encoding scheme prior to sending.

Claim 42 (Previously presented): The system of claim 41, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 43 (Previously presented): The system of claim 41, wherein the received encoded packets are decoded at the requesting computer, and then re-encoded for further transmission upon request.

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Claim 44 (Currently Amended): A system for using a computer for transferring data, comprising:

means to receive a request for data from a computer;

means to access a look-up list to identify a set of peer computers that have previously requested and downloaded at least a portion of the data, wherein the set of peer computers includes a first peer computer that has downloaded at least a first partial portion downloaded and a second peer computer that has downloaded at least a second partial portion without downloading all of the first partial portion;

means to initiate transfer of the previously downloaded portions of data from identified computers to the requesting computer, wherein the identified computers have only downloaded different partial portions of the requested data; and

~~means to independently encode the different partial portions of the data at the identified computers using an acknowledgement-independent equalized data packet encoding scheme;~~

means to send the encoded portions of the data from the identified computers to the requesting computer and complete downloading of the remaining portions of the data.

Claim 45 (Previously presented): The system of claim 44, wherein data transmission is accomplished over a peer-to-peer network, and wherein the computers that have previously downloaded the data are peers with the requesting computer.

Claim 46 (Currently Amended): The system of claim 44, wherein the sending means includes means for encoding and relaying encoded packets ~~are relayed.~~

Claim 47 (Original): The system of claim 44, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 48 (Original): The system of claim 44, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 49 (Original): The system of claim 44, wherein the look-up list is a mesh list.

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Claim 50 (Currently Amended): The system of claim 44, further comprising:  
means to independently encode the different partial portions of the data at the identified  
computers using an acknowledgement independent equalized data packet encoding scheme,  
wherein the acknowledgement independent equalized data packet encoding scheme is a  
FEC encoding.

Claim 51 (Original): The system of claim 44; wherein the data that is to be encoded is  
segmented before encoding.

Claim 52 (Currently Amended): A system for transferring data from a set of peer computers  
to a requesting computer, comprising:  
means to receive at a source computer a request to download data, wherein the source  
computer maintains a list of peer computers that have previously downloaded at least a portion of  
the data, wherein the list of peer computers specifies a first peer computer and a second peer  
computer, wherein, at the time of the request, the first peer computer has downloaded a first  
portion and the second peer computer has downloaded a second portion without downloading all  
of the first portion;  
means to encode the data at the peer computers for network data transmission using an  
acknowledgement independent equalized data packet encoding scheme at the direction of the  
source computer;  
means to send the encoded data from the peer computers to a requesting computer and  
complete the download of the remaining portions of the data.

Claim 53 (Original): The system of claim 52, wherein data transmission is accomplished over a  
peer-to-peer network.

Claim 54 (Original): The system of claim 52, wherein encoded packets are relayed.

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Claim 55 (Previously presented): The system of claim 52, wherein the list is populated with nodes based on data transfer rates.

Claim 56 (Previously presented): The system of claim 52, wherein the list is populated with nodes based on data types stored within the nodes.

Claim 57 (Previously presented): The system of claim 52, wherein the list is a mesh list.

Claim 58 (Original): The system of claim 52, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 59 (Original): The system of claim 52, wherein the data that is to be encoded is segmented before encoding.

Claim 60 (Currently Amended): A system for dynamically transferring data from a set of peer computers to a requesting computer, comprising:

means to send a request for data to a targeted computer capable of servicing the request;

means to receive ~~acknowledgement independent equalized~~ data packets from sending computers that have previously downloaded different portions of the data from the targeted computer, wherein the sending computers include a first peer computer that has downloaded a first portion and a second peer computer that has downloaded a second partial portion without downloading all of the first portion, wherein the sending computers send the data packets of the downloaded different portions and complete the download of the remaining portions of the data;

means to decode the received ~~encoded~~ data; and

means to save the decoded data memory.

Claim 61 (Original): The system of claim 60, wherein data transmission is accomplished over a peer-to-peer network.

Claim 62 (Original): The system of claim 60, wherein encoded packets are relayed.

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Claim 63 (Previously presented): The system of claim 60, further comprising means for maintaining at the targeted computer a list of the computers that have previously downloaded at least a portion of the requested data, wherein the list is populated with nodes based on data transfer rates.

Claim 64 (Previously presented): The system of claim 63, wherein the list is populated with nodes based on data types stored within the nodes.

Claim 65 (Previously presented): The system of claim 63, wherein the list is a mesh list.

Claim 66 (Currently Amended): The system of claim 60, wherein the data packets are encoded using an acknowledgement independent equalized data packet encoding scheme ~~is a FEC encoding~~.

Claim 67 (Original): The system of claim 60, wherein the data that is to be encoded is segmented before encoding.

Claim 68 (Original): The system of claim 60, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

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Claim 69 (Currently Amended): A program stored on a medium readable by a processor, the program comprising:

- a module to send a request for data to a targeted computer system;
- a look-up list that references other peer computers that previously downloaded different partial portions of the requested data and initiates transfer from the identified peer computers to the requesting computer ~~using an encoding scheme~~ while the identified peer computers complete the download of the remaining portions of the data, the peer computers including a first peer computer that has downloaded a first portion of the data and a second peer computer that has downloaded a second portion of the data without downloading all of the first portion;
- a module to receive the encoded data from identified peer computers;
- a module to decode the received encoded data; and
- a module to save the decoded data in memory.

Claim 70 (Original): The medium of claim 69, wherein data transmission is accomplished over a peer-to-peer network.

Claim 71 (Original): The medium of claim 69, wherein encoded packets are relayed.

Claim 72 (Previously presented): The medium of claim 69, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 73 (Original): The medium of claim 69, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 74 (Original): The medium of claim 69, wherein the look-up list is a mesh list.

Claim 75 (Currently Amended): The medium of claim 69, wherein the peer computers use an acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

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Claim 76 (Currently Amended): The medium of claim 7569, wherein the data that is to be encoded is segmented before encoding.

Claim 77 (Currently Amended): The medium of claim 7569, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

Claim 78 (Currently Amended): A program stored on a medium readable by a processor, the program comprising:

a module to receive a request for data from a requesting computer having one or more peer computers;

a module to identify which of the peer computers have previously requested and downloaded the data; and

a module to send requests to the identified peer computers to direct the peer computers to encode the data using an acknowledgement independent equalized data packet encoding scheme and send the encoded data to the requesting computer,

wherein the identified computers have received different partial portions of the requested data, wherein the identified computers include a first peer computer has downloaded at least a first portion and a second peer computer that has downloaded a second portion without downloading all of the first portion, and wherein the identified computers send the encoded data to the requesting computer and complete the download of the remaining portions of the requested data.

Claim 79 (Original): The medium of claim 78, wherein data transmission is accomplished over a peer-to-peer network.

Claim 80 (Original): The medium of claim 78, wherein encoded packets are relayed.

Claim 81 (Previously presented): The medium of claim 78, further comprising a module that maintains a look-up list that identifies the peer computers that previously downloaded the data, wherein the look-up list is populated with nodes based on data transfer rates.

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Claim 82 (Previously presented): The medium of claim 81, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 83 (Previously presented): The medium of claim 81, wherein the look-up list is a mesh list.

Claim 84 (Original): The medium of claim 78, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 85 (Original): The medium of claim 78, wherein the data that is to be encoded is segmented before encoding.

Claim 86 (Currently Amended): A program stored on a medium readable by a processor of a first peer computer of a peer to peer network, the program comprising:

a module to download data from a source computer;

a module to receive a request ~~from the source computer~~ to transfer at least some of the data to a requesting second peer computer, wherein the module receives the request after downloading a partial first portion of the data and before completing the download of the data has completed, wherein, at the time of the request, the first peer computer has downloaded the first portion and the second peer computer has downloaded a second portion without downloading all of the first portion.

a module to encode the previously downloaded partial first portion of the data using an acknowledgement independent equalized data packet encoding scheme; and

a module to send the encoded data to the requesting second peer computer and complete the download of any remaining portion of data from the source computer.

Claim 87 (Original): The medium of claim 86, wherein data transmission is accomplished over a peer-to-peer network.



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Claim 88 (Original): The medium of claim 86, wherein encoded packets are relayed.

Claim 89 (Previously presented): The medium of claim 86, wherein the source computer maintains a look-up list that lists the peer computers having previously downloaded the data, and wherein the look-up list is populated with nodes based on data transfer rates.

Claim 90 (Previously presented): The medium of claim 89, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 91 (Previously presented): The medium of claim 89, wherein the look-up list is a mesh list.

Claim 92 (Currently Amended): The medium of claim 86, wherein the ~~acknowledgement-independent-equalized-data packet~~ encoding scheme is a FEC encoding.

Claim 93 (Original): The medium of claim 86, wherein the data that is to be encoded is segmented before encoding.

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Claim 94 (Currently Amended): A program stored on a medium readable by a processor of a computer having a plurality of peer computers, the program comprising:

a module to send a request for data to a targeted computer capable of servicing the request;

a module to receive ~~acknowledgement independent equalized~~ encoded data packets from the peer computers that previously downloaded different partial portions of the data from the targeted computer and have not completed the download, the module configured to receive data packets from at least a first peer computer that has downloaded a first portion and a second peer computer that has downloaded a second portion without downloading all of the first portion. wherein the sending computers send the data packets of the downloaded different portions and complete the download of the remaining portions of the data;

a module to decode the received encoded data; and

a module to save the decoded data in memory.

Claim 95 (Previously presented): The medium of claim 94, wherein data transmission is accomplished over a peer-to-peer network.

Claim 96 (Previously presented): The medium of claim 94, wherein encoded packets are relayed.

Claim 97 (Previously presented): The medium of claim 94, wherein the targeted computer maintains a look-up list is populated with nodes based on data transfer rates.

Claim 98 (Previously presented): The medium of claim 94, wherein the targeted computer maintains a look-up list is populated with nodes based on data types stored within the nodes.

Claim 99 (Previously Presented): The medium of claim 94, wherein the targeted computer maintains a look-up list is a mesh list.

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Claim 100 (Currently Amended): The medium of claim 94, wherein the ~~acknowledgement-independent-equalized-data-packet encoding scheme~~ is a FEC encoding.

Claim 101 (Previously presented): The medium of claim 94, wherein the data that is to be encoded is segmented before encoding.

Claim 102 (Previously presented): The medium of claim 94, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

Claim 103 (Currently Amended): A network transmission apparatus comprising:

- a processor;

- a memory communicatively connected to the processor;

- a program, stored in the memory, including,

  - a module to send a request for data to a targeted computer system;

  - a look-up list that references other peer computers that previously downloaded portion of the requested data, wherein the list of peer computers specifies that a first peer computer and a second peer computer, the first peer computer having downloaded at least a first portion and the second peer computer having downloaded at least a second portion without downloading all of the first portion;

  - a module that and initiates transfer from the identified peer computers to the requesting computer using an encoding scheme;

  - a module to receive the encoded data from identified peer computers, wherein the identified computers have received different partial portions of the requested data from the targeted computer system, and wherein the identified peer computers send encoded partial portions of the data and complete downloading the remaining portions of the data from the targeted computer system;

  - a module to decode the received encoded data; and

  - a module to save the decoded data in memory.

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Claim 104 (Original): The apparatus of claim 103, wherein data transmission is accomplished over a peer-to-peer network.

Claim 105 (Original): The apparatus of claim 103, wherein encoded packets are relayed.

Claim 106 (Original): The apparatus of claim 103, wherein the look-up list is populated with nodes based on data transfer rates.

Claim 107 (Original): The apparatus of claim 103, wherein the look-up list is populated with nodes based on data types stored within the nodes.

Claim 108 (Original): The apparatus of claim 103, wherein the look-up list is a mesh list.

Claim 109 (Currently Amended): The apparatus of claim 103, wherein the encoding scheme is an acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 110 (Original): The apparatus of claim 103, wherein the data that is to be encoded is segmented before encoding.

Claim 111 (Original): The apparatus of claim 103, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

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**Claim 112 (Currently Amended):** A network transmission apparatus, comprising:

a processor;

a memory, communicatively connected to the processor;

a program, stored in the memory, including;

a module to receive a request for data from a requesting computer having one or more peer computers;

a module to identify which of the peer computers have previously requested and downloaded the data; and

a module to send requests to the identified peer computers to direct the peer computers to send the data to the requesting computer,

wherein the identified peer computers have downloaded different partial portions of the requested data, and the identified peer computers include a first peer computer that has downloaded a first portion and a second peer computer has downloaded a second partial portion without downloading all of the first portion.

and wherein the identified computers send the ~~encoded~~ data to the requesting computer and complete downloading the remaining portions of the requested data.

**Claim 113 (Original):** The apparatus of claim 112, wherein data transmission is accomplished over a peer-to-peer network.

**Claim 114 (Previously presented):** The apparatus of claim 112, wherein the data is relayed.

**Claim 115 (Previously presented):** The apparatus of claim 112, wherein the program further comprises a module that maintains a lookup list, wherein the look-up list is populated with nodes based on data transfer rates.

**Claim 116 (Previously presented):** The apparatus of claim 112, wherein the program further comprises a module that maintains a lookup list, wherein the look-up list is populated with nodes based on data types stored within the nodes.

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Claim 117 (Previously presented): The apparatus of claim 112, wherein the program further comprises a module that maintains a lookup list, wherein the look-up list is a mesh list.

Claim 118 (Previously presented): The apparatus of claim 112, wherein the module that sends the requests to the identified peer computers further directs the peer computers to encode the data using an acknowledgement independent equalized data packet encoding scheme.

Claim 119 (Previously presented): The apparatus of claim 118, wherein the data that is to be encoded is segmented before encoding.

Claim 120 (Currently Amended): A network transmission apparatus, comprising:

- a processor;

- a memory, communicatively connected to the processor;

- a program, stored in the memory, including,

  - a module to download data from a source computer;

  - a module to receive a request from the source computer to transfer the data to a peer computer that has already downloaded one or more portions of the data, wherein the module receives the request after downloading a partial portion of the data that includes at least some data different from the data downloaded by the peer computer and before downloading a remaining portion of the data;

  - a module to encode the previously downloaded partial portion of the data ~~using an acknowledgement independent equalized data packet encoding scheme~~; and

  - a module to send the encoded partial portion of the data to the peer computer and complete the download of the remaining portion of the data.

Claim 121 (Original): The apparatus of claim 120, wherein data transmission is accomplished over a peer-to-peer network.

Claim 122 (Original): The apparatus of claim 120, wherein encoded packets are relayed.

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**Claim 123 (Previously presented):** The apparatus of claim 120, wherein the source computer maintains a look-up list that is populated with nodes based on data transfer rates.

**Claim 124 (Previously presented):** The apparatus of claim 120, wherein the source computer maintains a look-up list that is populated with nodes based on data types stored within the nodes.

**Claim 125 (Previously presented):** The apparatus of claim 120, wherein the source computer maintains a look-up list that is a mesh list.

**Claim 126 (Original):** The apparatus of claim 120, wherein the acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

**Claim 127 (Original):** The apparatus of claim 120, wherein the data that is to be encoded is segmented before encoding.

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Claim 128 (Currently Amended): A network transmission apparatus, comprising:

a processor;

a memory, communicatively connected to the processor;

a program, stored in the memory, including,

a module to send a request for data to a targeted computer capable of servicing the request;

a module to receive ~~acknowledgement independent equalized~~ data packets from at least ~~two or more different the peer computers that previously downloaded different portions of the data from the targeted computer,~~ a first peer computer that has downloaded a first portion and a second peer computer that has downloaded a second portion without downloading all of the first portion, ~~wherein the peer computers send the downloaded different portions of the data and complete the download of the remaining portions of the data;~~

a module to decode the received ~~eneoded~~ data; and

a module to save the ~~deecoded~~ data in memory.

Claim 129 (Original): The apparatus of claim 128, wherein data transmission is accomplished over a peer-to-peer network.

Claim 130 (Currently Amended): The apparatus of claim 128, wherein ~~eneoded~~ packets are relayed.

Claim 131 (Previously presented): The apparatus of claim 128, wherein the targeted computer maintains a look-up list that is populated with nodes based on data transfer rates.

Claim 132 (Previously presented): The apparatus of claim 128, wherein the targeted computer maintains a look-up list that is populated with nodes based on data transfer rates.

Claim 133 (Previously presented): The apparatus of claim 128, wherein the targeted computer maintains a look-up list that is a mesh list.



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Claim 134 (Currently Amended): The apparatus of claim 128, wherein the data packets are encoded using an acknowledgement independent equalized data packet encoding scheme is a FEC encoding.

Claim 135 (Original): The apparatus of claim 128, wherein the data that is to be encoded is segmented before encoding.

Claim 136 (Original): The apparatus of claim 128, wherein the received encoded packets are decoded, and then re-encoded for further transmission upon request.

Claim 137 (Cancelled).

Claim 138 (New): A method for distributing a data within a computer network, the method comprising:

- storing, at a starting computer, original data;

- maintaining a table to store at least an address of computers that can transmit portions of the stored data;

- receiving requests for the data from a first requesting computer and a second requesting computer;

- delivering a first portion of data from the starting computer to the first requesting computer;

- delivering a second portion of the data to the second requesting computer; and

- prior to delivering all of the data to either the first requesting computer or the second requesting computer, exchanging the first portion and the second portion of the data between the first requesting computer and the second requesting computer.

Application Number 10/033,305

Responsive to Office Action mailed February 27, 2007

Claim 139 (New): A download method for a file in a computer network comprising:

- storing, at a starting computer, a file;
- receiving a first file download request from a first computer;
- downloading, from the starting computer, a first portion of the file to the first computer;
- upon downloading the first portion of the file at the first computer, updating a table to record that the first portion of the file was received;
- receiving a second download request from a second computer;
- downloading a second portion of the file to the second computer, the first portion containing at least some data of the original file not contained within the second portion;
- upon downloading the second portion of the file at the second computer, updating a table to record that the second portion of the file was received;
- issuing a request from the second computer to the first computer for the data of the file not contained within the second portion; and
- prior to downloading the entire file at the first computer, communicating, from the first computer to the second computer, at least some of the data of the original file not contained within the second portion.

140 ( New) The method of claim 139, further comprising completing the download of the file at the first computer and the second computer by downloading one or more remaining portions of the file.